

## Water Quality, Health and Justice Cooperative Extension Specialist

### Position Overview

**Location Headquarters.** Housed at University of California - Irvine, and appointed through UC Agriculture and Natural Resources (UC ANR).

**Purpose.** The Cooperative Extension (CE) specialist in Water Quality, Health and Justice will deliver a collaborative, multifaceted research and outreach program focused on needs and issues related to water resource and quality management, treatment and reuse, and low impact development, within the context of health and social equity.



The CE specialist will develop multi-disciplinary collaborations with other UC and outside researchers to address needs and seek out opportunities to bring private-sector partners and other stakeholders into these collaborations.

The CE specialist is expected to develop an extramurally-funded research and extension education program to address water issues; forge strong interactions with local, regional, state and national partners and clientele, as well as with UC colleagues; contribute to core research and extension goals established within UC ANR; and assist in establishing an innovative multi-disciplinary program in their field of expertise.

This is an exciting opportunity to have meaningful impacts throughout California. Opportunities abound for research and extension partnerships that link consumers and resource professionals with relevant science-based information and promote effective problem-solving. The CE Specialist joins a team of highly motivated UCCE colleagues who are passionate about their work and are dedicated to making a difference within the communities and throughout California. The potential for collaborative projects within the UC ANR system is nearly limitless.

**Reporting Relationship:** The CE specialist is academically and administratively responsible to the Chair of the Department of Civil and Environment Engineering (CEE) and the Dean of the School of Social Ecology at UC Irvine. UC ANR will oversee the merit and promotion process, consistent with other UC ANR CE Specialists. The position will be stationed at the UCI campus located in Irvine, CA. There may be an opportunity for the CE specialist to hold an additional 0% (uncompensated) Adjunct Professor series appointment, reporting academically and administratively to the appropriate Department Chair(s).

## Research

All CE Specialists are expected to develop and implement applied research programs to provide science-based information addressing complex issues such as drought and its interactions with metabolic processes. This position will focus generally on providing more research-policy and planning support in the areas of improving water quality and access. Areas of research could involve research outreach around the areas of:



- (1) design and test integrated natural and engineered treatment technologies to remove or reduce salt, nutrients, selenium and trace organics of toxicological concern from agricultural drainage water, municipal wastewater and urban stormwater;
- (2) analyze long-term economic, environmental, and societal benefits of on-site treatment and reuse of irrigation water, stormwater and municipal wastewater;
- (3) develop and analyze different policy and management scenarios for successful implementation of technologies in the affected regions;
- (4) address how residual contaminants in recycled wastewater, including the emergence of antibiotic resistant genes, pathogens and the new classes of contaminants such as nanoparticles, influence the soil microbiome structure, plant health, food safety, and environmental quality;
- (5) improve the engineering processes and develop novel energy-neutral treatment technologies to treat water for reuse in agricultural and landscape irrigation;
- (6) quantify the risks and provide data to support policy decisions regarding water reuse in food production;
- (7) examine proposed regulatory changes to enable broader implementation of water reuse in food production;
- (8) develop a dynamic regional water supply model that can identify the cost and water supply impacts of continuing to provide agriculture with recycled water; and
- (9) assess the disproportionate impacts of these problems and current responses to them upon water agencies and their communities with smaller revenue bases and less capacity for capital investments to provide a more secure water supply with difficulty.

## EXTENSION

The CE Specialist's objective is to foster a collaborative, multidisciplinary, cutting-edge research and extension program that involves diverse stakeholders, and integrate research objectives across wastewater treatment engineering, agricultural science, environmental sciences, policy, social science and economics with multiple feedback channels. The CE Specialist will develop stakeholder outreach programs to solicit needs and disseminate research outcomes to target audiences in collaboration with UC ANR programs; and develop an integrated interdisciplinary educational program to train students, farmers, state and local water engineers, water quality regulators, landscapers, NGOs and general public about opportunities to manage drainage and storm waters and how these strategies fit within a portfolio of other management practices.

## Qualifications and Skills Required

### Required Qualifications

**Education** A minimum of a Ph.D. is required (or international equivalent) related to water resource and quality management, treatment and reuse, low impact development, and health and social equity. Applicants who have not yet earned a Ph.D. must be within 12 months of completing their degree in order to be considered for the position. Excellent written, oral and interpersonal communication skills are required. A demonstrated ability in applied agricultural research and extension of information is desirable. Experience in securing and managing extramural grants, carrying out field-based research, and publishing multi-disciplinary research is

desirable.

## **Additional Expectations**

All UC ANR CE specialists are responsible for performance in the areas of 1) applied research and creative activity, 2) extending knowledge and information, 3) professional competence and activity, and 4) University and public service.

## **Skills Required**

The CE specialist will interact with UC ANR program teams, CE advisors, other CE specialists, and others within the research/extension network and advisory groups to develop, strengthen and expand the delivery of statewide products.

### **Technical competence**

- Conduct and report needs assessments to identify priority issues or problems relevant to the local clientele groups being served.
- Develop and implement effective UC ANR Cooperative Extension applied research and educational programs to address the identified priority needs of the clientele that are consistent with ANR's Strategic Vision and ANR initiatives;
- Conduct applied research designed to monitor changes and solve statewide and locally relevant problems related to water quantity and quality in crop production;

### **Communication**

- Disseminate appropriate, science-based information to inform clientele, using extension methods that are responsive to clientele needs and appropriate for the audience and situation;
- Maintain and promote UC ANR Cooperative Extension's credibility by providing science-based knowledge;
- Evaluate programs and report accomplishments, results, and potential or actual impacts to scientific and lay audiences through a variety of outreach methods e.g., peer-reviewed publications, internet, workshops, newsletters;
- Collaborate closely with the advisory committee.

### **Collaboration & Teamwork**

- Interact with their campus academic colleagues, thereby creating synergies that will advance the programmatic goals of both the UC Irvine and of UC ANR;
- Interact with UC Irvine undergraduate students and graduate students in Environmental Systems and other relevant graduate programs via occasional lectures and other academic functions (such as serving on dissertation committees, oral exams, etc.) as appropriate. In accordance with UC Academic Personnel Policy 334, Specialist in Cooperative Extension Series, the teaching of regular undergraduate or graduate courses will not be a primary responsibility of the position;
- Engage in campus faculty meetings, campus faculty committee service, and other activities of the UC Irvine faculty as appropriate.

## **Lifelong Learning**

Demonstrated commitment to ongoing self-improvement - both professionally and as a person.

**Learn more about Skills and Areas of Programmatic Review** All UC ANR CE specialists are responsible for performance in the areas of 1) applied research and creative activity, 2) extending knowledge and information, 3) professional competence and activity and 4) University and public service (with awareness and impact in relation to Affirmative Action and DEI).

## About UC ANR and UCI

The University of California, Division of Agriculture and Natural Resources (UC ANR) consists of a network of scientists and educators working in partnership across the California. We are committed to developing and supporting healthy food systems, healthy environments, healthy communities, and healthy Californians. UC ANR administers UC Cooperative Extension (UCCE), which is responsible for program development and delivery in the counties throughout the state of California.

Founded in 1965, UCI is the youngest member of the prestigious Association of American Universities and is ranked among the nation's top 10 public universities by *U.S. News & World Report*. The campus has produced five Nobel laureates and is known for its academic achievement, premier research, innovation and Anteater mascot. Led by Chancellor Howard Gillman, UCI has more than 36,000 students and offers 224 degree programs. It's located in one of the world's safest and most economically vibrant communities and is Orange County's second-largest employer, contributing \$7 billion annually to the local economy and \$8 billion statewide. For more on UCI, visit [www.uci.edu](http://www.uci.edu).

Water UCI is an interdisciplinary center in the School of Social Ecology that facilitates seamless collaboration across schools, departments, and existing research centers around questions of fundamental and applied water science, technology, management, and policy.

### Learn more about

- UC ANR at <https://UCANR.edu>
- UC Irvine <https://uci.edu>
- Our UC ANR Strategic Initiatives <http://ucanr.edu/sites/StrategicInitiatives/>
- Our UC ANR Public Value statements at [https://ucanr.edu/sites/anrstaff/Divisionwide\\_Planning/UC\\_ANR\\_Public\\_Values/](https://ucanr.edu/sites/anrstaff/Divisionwide_Planning/UC_ANR_Public_Values/)
- **DEI:** Further to the above, CE Specialists are expected to share and exhibit UC ANR's commitment to Diversity, Equity and Inclusion [https://ucanr.edu/sites/Professional\\_Development/Office - Team Management/Diversity Equity Inclusion Belonging/](https://ucanr.edu/sites/Professional_Development/Office_-_Team_Management/Diversity_Equity_Inclusion_Belonging/)
- **Affirmative Action:** Further to the above, CE Specialists are expected to share and exhibit UC ANR's commitment to affirmative action. Learn more of UC ANR Affirmative Action policy: [http://ucanr.edu/sites/anrstaff/Diversity/Affirmative\\_Action/](http://ucanr.edu/sites/anrstaff/Diversity/Affirmative_Action/)
- The University of California Agriculture and Natural Resources is committed to attracting and retaining a diverse workforce and will honor your experiences, perspectives and unique identity. We encourage applications from members of historically underrepresented racial/ethnic groups, women, individuals with disabilities, veterans, LGBTQ+ community members, and others who demonstrate the ability to help us create and maintain working and learning environments that are inclusive, equitable and welcoming.

## Salary & Benefits

**Salary:** Beginning salary will be in the **Assistant Cooperative Extension Specialist Series** and commensurate with applicable experience and professional qualifications. This is an indefinite-track, position. All provisions of UC Academic Personnel Policy 334, Specialist in Cooperative Extension Series apply. For information regarding the Cooperative Extension Specialist salary scale, please refer to <https://www.ucop.edu/academic-personnel-programs/files/2022-23/july-2022-salary-scales/t29.pdf>

**Benefits:** The University of California offers comprehensive benefits including health insurance, retirement plans, two days per month paid vacation, one day per month paid sick leave, and

approximately thirteen paid holidays per year. ANR is part of UC's Family-Friendly Policies. For more information, refer to the UC Benefits website at: <https://ucnet.universityofcalifornia.edu/compensation-and-benefits/index.html>

## How to Apply

If interested in this position, please visit: <https://recruit.ucanr.edu/> and choose “applicants” (refer to position #22-60)

**Closing Date:** To assure full consideration, application packets must be received by **November 7, 2022** (open until filled).

### Interview information:

A search committee comprised of UC ANR and UCI representatives will review all applications, interview candidates, and recommend individuals most suitable for the position.

## Questions?

Contact Tatiana Avoce; email: [tavoce@ucanr.edu](mailto:tavoce@ucanr.edu)

Applicants may wish to explore the UC Davis Services for International Students and Scholars web page at <https://siss.ucdavis.edu> and the [UC ANR Green Card Sponsorship Guidelines & FAQ's](#) for reference.

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### *University of California Cooperative Extension*

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As a condition of employment, you will be required to comply with the University of California [SARS-CoV-2 \(COVID-19\) Vaccination Program Policy](#). All Covered Individuals under the policy must provide proof of Full Vaccination or, if applicable, submit a request for Exception (based on Medical Exemption, Disability, and/or Religious Objection) or Deferral (based on pregnancy) no later than the applicable deadline. New University of California employees should refer to Appendix F, Section II.C. of the policy for applicable deadlines. (Capitalized terms in this paragraph are defined in the policy.) Federal, state, or local public health directives may impose additional requirements.

The University of California is an Equal Opportunity/Affirmative Action Employer. All qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, disability, age, protected veteran status or other protected categories covered by the UC nondiscrimination policy.

As of January 1, 2014, ANR is a smoke- and tobacco-free environment in which smoking, the use of smokeless tobacco products, and the use of unregulated nicotine products (e-cigarettes), is strictly prohibited.